# RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation DT1241 02/2011

### **INSTRUCTIONS:**

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

☐ F	DOT research program Policy research Other		_	nway Research Progra PF#	m	Report period year: 2013  Quarter 1 (Jan 1 – Mar 31)  Quarter 2 (Apr 1 – Jun 30)  Quarter 3 (Jul 1 – Sep 30)  Quarter 4 (Oct 1 – Dec 31)						
Proj	ect title: Static Pile Load 7	Tests on Driven F	Piles in	to Intermediate Geo Ma	terials							
Proj	ect investigator: James H	Long	Phone	e: 217 333-2543		E-mail: jhlong@uiuc.edu						
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Wisl	DOT project ID: 0092-12	-08	Other	project ID:		Project start date: 8/1/2011						
Original end date: 8/1/2011				nt end date: 6/30/2014	ŀ	Number of extensions: 1						
Proj	ect schedule status:   On schedule	⊠ On revis	ed sch	edule	ad of s	chedule	☐ Behind schedule					
Project budget status:												
	Total Expenditu Project Budget Current Qua			Total Expenditures		% Funds Expended	% Work Completed					
	\$95,000,00 \$0.00			\$40.000.00		42%	65%					

#### **Project description:**

The objective of the research is to develop and perform three static pile load tests and evaluate the results for piles driven into intermediate Geomaterials. Three different locations will be identified around the state. The H-piles shall be driven into IGM under current WisDOT design and construction standards. The static pile load tests, with PDA/CAPWAP analysis will help the department better understand the conditions of driving H-piles in IGM.

**Progress this quarter** We are continuing to review the analysis results for the 1<sup>st</sup> and 2<sup>nd</sup> set of static and dynamic load tests and are putting together a package of results that will be reviewed by an independent expert in pile dynamic testing. We are currently reviewing other work on piles in intermediate geomaterials, and we are getting materials together to make a presentation to the Technical Review Panel.

## Anticipated work next quarter:

Further field work will be conducted as load test projects are identified by WisDOT become available. We will present results to the technical review panel before the end of 2013.

### Circumstances affecting project or budget:

This quarter, we requested a no-cost extension for this project to accommodate the inclusion of the 3<sup>rd</sup> set of static and dynamic load tests. Scheduling the anticipated load tests is dependent on the Wisconsin DOT construction schedule. Two locations have already been tested, and one location for load testing remains. We are within the budget estimates and do not anticipate a change in budget, even if a time extension is necessary.

Attach / insert Gantt chart and other project documentation

#### Static Pile Load Tests on Driven Piles into Intermediate Geo-Materials

	Intermediate Geo-Materials	. 3	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		201			2011			2012									5 1	2013	
Task	Description	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
1	Literature Search and Background Study																		
2	Development of Requirements for Pile Installation and Load Test Setup			$\vdash$					П	Т									
3	Evaluation and Monitoring of Static Pile Load Tests														Г				
4a	Data Analysis, Summary									LL S				o r					10
4b	Draft report and Final Report																		
	Meeting with TOC committee in Madison	M					M								$\vdash$		$\vdash$		M

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Staff receiving QPR: K. Dinkins	Date received: 9/30/2013
Staff approving QPR:	Date approved: